

Abstract of the Disclosure:

A switching regulator has a drive circuit, receiving an intermediate circuit input voltage, an output voltage of an intermediate circuit capacitor and an output current at a current measuring element and controls the electrical output parameters and the power factor of the switching regulator in accordance with an adjustable desired value by controlling the duty ratio of a power switch. The drive circuit has a start circuit for dynamically increasing a current limiting level for the power switch during a start time after the switch-on instant of the switching regulator from an initially low level up to a current-limiting desired level at the end of the start time. The loading current-time integral for the diode and the power switch of the power factor correction circuit of the switching regulator is the least with this soft start circuit. Moreover, noise due to abrupt magnetic driving of the inductor is avoided.

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